PTO-1390 (Rev. 07-2005) Approved for use through 3/31/2007. OMB 0651-0021 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) **CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

A power of attorney and/or change of address letter.

ATTORNEY'S DOCKET NUMBER 14507-50900

U.S. APPLICATION Unassigned

INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PRIORITY DATE CLAIMED PCT/US2004/000755 13 January 2004 13 January 2003 TITLE OF INVENTION Methods Of Detecting Gene Expression In Normal And Cancerous Cells APPLICANT(S) FOR DO/EO/US Lily Yang, Gang Bao, Charles Staley, and Cynthia Cohen Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. is not required, as the application was filed in the United States Receiving Office (RO/US). An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. has been previously submitted under 35 U.S.C. 154(d)(4). ₇ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification.

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.

A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).

A second copy of the published International Application under 35 U.S.C. 154(d)(4).

PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

SUBTOTAL = \$ 812.50 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). TOTAL NATIONAL FEE = \$ 812.50 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$ 812.50 Amount to be refunded: \$ Amount to be		FION NO. (if known,	see 37 CFR 1.5)	INTERNATIONAL AF	PLICATION NO.	ATTORNEY'S DOCI	KET NUMBER	
PCT Request PCT/RO/101; PCTI/RS/225; Response to Invitation to Furnish Nucleide and/ or Amino Acid Sequence Listing; PCTI/BI/303; PCTI/	Unassigned	10 /5 47		PCT/US2004/000755	5	14507-50900		
21.	PCT Request PCT/RO/101; PCT/ISA/225; Response to Invitation to Furnish Nucleotide and/ or Amino Acid Sequence Listing; PCT/IB/301; PCT/IB/306; PCT/IB/308 First Notice; PCT/ IB/308 Second Notice; Credit Card Authorization in the Amount of \$812.50; Authorization to							
21.	The foll	owing fees have b	een submitted	***		CALCULATIONS	PTO USE ONLY	
If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)		=			\$300			
by IPEAUS indicates all claims satisfy provisions of PCT Article 33(1)-(4)	22. 🗸 Exan	nination fee (37 CF	R 1.492(c))					
If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)	If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0							
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. Total Sheets	If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)							
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. Total Sheets	TOTAL OF 21 22 and 23 =					\$300.00		
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)). CLAIMS NUMBER FILED NUMBER EXTRA RATE	Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)).							
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)). CLAIMS NUMBER FILED NUMBER EXTRA RATE \$ Total claims 49 - 20 = 29	Total Sheets	Extra Sheets						
### STOTAL NATIONAL FEE ### STOTAL FEES ENCLOSED = \$ 812.50 ### Amount to be refunded: ** ### Amount to be refunded: ** ### ATE ** *** *** *** *** *** *** ***	83 - 100 =	0 /50 =	0_		× \$250	\$ 0.00	'	
Total claims 49 -20 = 29						\$		
Independent claims 6 -3 = 3	CLAIMS	NUMB	ER FILED	NUMBER EXTRA	RATE	\$		
MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360 \$ TOTAL OF ABOVE CALCULATIONS = \$1625 Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½. 812.50 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). TOTAL NATIONAL FEE = \$812.50 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + \$12.50 TOTAL FEES ENCLOSED = \$812.50 Amount to be refunded: \$ Amount to be \$812.50	Total claims	49	- 20 =	29	x \$ 50	\$ 725.00		
TOTAL OF ABOVE CALCULATIONS = \$ 1625 Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½. 812.50 SUBTOTAL = \$ 812.50 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). + TOTAL NATIONAL FEE = \$ 812.50 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$ 812.50 Amount to be refunded: \$ Amount to be	Independent clai	ms 6	- 3 =	3	× \$200	\$ 600.00		
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. SUBTOTAL = \$812.50 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). TOTAL NATIONAL FEE = \$812.50 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property TOTAL FEES ENCLOSED = \$812.50 Amount to be refunded: Amount to be	MULTIPLE DEPI	ENDENT CLAIM(S	6) (if applicable)		+ \$360	\$		
SUBTOTAL = \$ 812.50 Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). TOTAL NATIONAL FEE = \$ 812.50 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$ 812.50 Amount to be refunded: \$ Amount to be				TOTAL OF ABOVE	CALCULATIONS =	\$ 1625		
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)). TOTAL NATIONAL FEE = \$812.50 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$812.50 Amount to be refunded: \$ Amount to be \$912.50	Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.					812.50		
claimed priority date (37 CFR 1.492(i)). + STOTAL NATIONAL FEE = \$812.50 Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$812.50 Amount to be refunded: \$812.50					SUBTOTAL =	\$ 812.50		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$812.50 Amount to be refunded: \$ Amount to be \$912.50	_			translation later than 30 mon	ths from the earliest	\$		
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property + TOTAL FEES ENCLOSED = \$812.50 Amount to be refunded: Amount to be	TOTAL NATIONAL FEE =					\$ 812.50		
TOTAL FEES ENCLOSED = \$ 812.5U Amount to be refunded: \$ Amount to be \$ 942.50								
Amount to be refunded: \$ Amount to be \$ Amou	TOTAL FEES ENCLOSED =				\$ 812.50			
Amount to be \$ 842.50							\$	
		*				Amount to be	\$ 812.50	

10/542117

JC14 Rec'd PCT/PTO 12 JUL 2005

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of Information unless it displays a valid OMB control number.

a. 🗌	A check in the amount of \$ to cover the above	e fees is enclosed.							
ь. 🔲	Please charge my Deposit Account No. 50-3537 in the amount of \$ A duplicate copy of this sheet is enclosed.	to cover the above fees.							
c. 🗸	The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-3537 A duplicate copy of this sheet is enclosed.								
d. 🗸	Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.								
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.									
·	ALL CORRESPONDENCE TO: Morris, Manning & Martin, LLP 1600 Atlanta Financial Center 3343 Peachtree Road NE Atlanta, Georgia 30326-1044	SIGNATURE Tim Tingkang Xia, Esq. NAME 45,242 REGISTRATION NUMBER							

S/N Unassigned

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Lily Yang et al.

Express Mail Label No.

EL617581195US

Serial No.:

Unassigned

Group Art Unit:

Unassigned

Filed:

July 12, 2005

Docket No.:

14507-50900

Title:

METHODS OF DETECTING GENE EXPRESSION IN NORMAL AND

CANCEROUS CELLS

CERTIFICATE UNDER 37 CFR 1.10

'Express Mail' mailing label number: EL617581195US

Date of Deposit: July 12, 2005

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 and is addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450,

Alexandria, VA 22313-1450.

By:

Name: Tim Tingkang

AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 July 12, 2005

CUSTOMER NO. 24728

Dear Sir:

Please charge any additional fees or credit overpayments to Deposit Account

No. 50-3537.

Respectfully submitted

MORRIS, MANNING & MARTIN, LLP

July 12, 2005

Tim Tingkang Xia, Esq.

Reg. No. 45,242

Attorney for Assignee on the Record

TTX

MORRIS, MANNING & MARTIN, LLP 1600 Atlanta Financial Center 3343 Peachtree Road, N.E. Atlanta, Georgia 30326-1044

Phone: 404-233-7000 Direct: 404-495-3678 Customer No. 24728

JEST AVAILABLE COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Lily Yang, et al.

Docket:

14507-50900

Title:

METHODS OF DETECTING GENE EXPRESSION IN NORMAL AND CANCEROUS CELLS

CERTIFICATE UNDER 37 CFR 1.10

'Express Mail' mailing label number: El617581195US

Date of Deposit: July 12, 2005

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'Express Mail Post Office To Addressee' service under 37 CFR 1.10 and is addressed to Mail Stop PCT, Commissioner for Patents, P.O. Box 1450,

Alexandria, VA 22313-1450.

By:

Name: Tim Tingkang Xia

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Customer No. 24728

Sir:

We are transmitting herewith the attached:

☐ Transmittal Letter to the United State Designated/Elected Office (DO/EO/US)

Concerning a Filing Under 35 U.S.C. 371 (3 pages)

Copy of International Publication No. WO 2004/062487 A2(56 pages)

Copy of PCT Request PCT/RO/101 (5 pages)

Copy of PCT/ISA/225 Invitation to Furnish Nucleotide

and/or Amino Acid Sequence Listing (1 page)

Response to Invitation to Furnish Nucleotide and/or Amino Acid Sequence Listing (7 pages)

A diskette with the Sequence Listing (1 diskette)

Copy of PCT/IB/301 Notification of Receipt of Record Copy (2 pages)

Copy of PCT/IB/306 Notification of the Recording of a Change (1page)

Copy of PCT/IB/308 First Notice Informing the Applicant of the

Communication of the International Application (1 page)

Copy of PCT/IB/308 Second and Supplementary Notice Informing the Applicant of the

Communication of the International Application (1 page)

Application Data Sheet (4 page)

Copy of General Power of Attorney (1 page)

Credit Card Authorization Form-2038 in the Amount of \$812.50

Authorized to charge any additional fee(s) or underpayments of fee(s) or

credit any overpayments under 37 CFR 1.16 and 1.17 to Deposit Account No. 50-3537 (1 page)

Return postcard

Please send all Correspondence to:

Tim Tingkang Xia, Esq. MORRIS, MANNING & MARTIN, LLP

> 1600 Atlanta Financial Center 3343 Peachtree Road NE

Atlanta, Georgia 30326

404-233-700 (Main)

404.495.3678 (Direct)

Customer No. 24728

Name: Tim Tingkang Xia

Reg. No.: 45,242

TX

(PTO TRANSMITTAL - NEW FILING)

10/542117

S/N: PCT/US2004/000755

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Yang et al.

Docket:

14507-44296

.

PCT/US2004/000755

Filed:

January 13, 2004

(previously 60068.5WOU1)

Serial No.: Due Date:

February 11, 2005

Authorized Officer.

Sigfried Hostad

Title:

Methods of Detecting Gene Expression in Normal and Cancerous Cells

CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this Transmittal Letter and the papers, as described herein, are being deposited via First Class Mail in an envelope addressed to: Mail Stop PCT Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on January 31, 2005.

Ву:_

Tim Tingkang Xia

RESPONSE TO NOTICE TO INVITATION TO FURNISH NUCLEOTIDE AND/OR AMINO ACID SEQUENCE LISTING AND/OR TABLES RELATED THERETO COMPLYING WITH STANDARD AND/OR TECHNICAL REQUIREMENTS

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 *Customer No. 24728*

January 31, 2005

Dear Officer Hostad:

In response to the Invitation to Furnish Nucleotide And/or Amino Acid Sequence Listing And/or Tables Related Thereto Complying With Standard And/or Technical Requirements mailed January 11, 2005. Applicant hereby submits,

- a) a paper copy of Sequence Listing in written form (3 pages);
- b) that the Sequence Listing does not go beyond the disclosure in the international application as filed;
- a diskette with electronic copy of Sequence Listing in computer readable form
 (1 diskette);
- d) that the Sequence Listing information recorded in computer readable form (on paper or compact disc) is identical to the Sequence Listing in written form;
- e) that the submission of (a) and (c) includes no new matter.

S/N: PCT/US2004/000755

Please send any future correspondence to Mr. Tim Tingkang Xia at the address associated with Customer Number 24728, and kindly update the record at the PCT Receiving Office to reflect the current Attorney Docket No. 14507-44296.

Applicant believes that the submission of this paper with the statements as set forth above completes the filing of all necessary papers and respectfully requests that the referenced application be passed along for examination.

Respectfully submitted,

MORRIS, MANNING & MARTIN, LLP

January 31, 2005

Tim Tingkang Xia Reg. No. 45,242

MORRIS, MANNING & MARTIN, L.L.P. 1600 Atlanta Financial Center 3343 Peachtree Road, N.E. Atlanta, Georgia 30326 404-233-7000 Main 404-495-3678 Direct Customer No. 24728



The official stamp of the United States Patent and Trademark Office (USPTO) hereon acknowledges receipt by the USPTO of the documents itemized below.

Applicant: Var	derbilt University	Mailing Date:	January 31, 2005			
Serial No.:	PCT/US2004/000755	Docket No.:	14507-44296 (previously 60068.5WOU1)			
Filing Date:	13 January 2004	Authorized Officer:	Sigfried Hostad			
Title:	Methods of Detecting Ge	Methods of Detecting Gene Expression in Normal and Cancerous Cells				

Enclosed please find the following:

- Transmittal Sheet containing Certificate of Mailing Response to Invitation to Furnish Nucleotide and/or Amino Acid Sequence Listing (2 pages)
- Paper copy of Sequence Listing (3)
- Diskette Containing Electronic Copy of Sequence Listing (1 disckette)
- Return postcard

TTX/jxs

